| 1 (106 219 215 215 21 214 214 215 214 214 214 214 214 214 214 214 214 215 215 215 215 215 214 214 214 214 214 214 214 214 214 214  | _       | Bits   | DBs  | Time Stamp                          |
|--|---------|--|--|-------------------------------------|
| 1516 519 521 524 and   | <u></u> | (516 519 521 524) and (magnetic  | US-PGPUB; USPAI;<br>EPO: JPO: DERWENT:             | 20                                  |
| (316 519 521 524) and (magnetic with impurity)  (316 519 521 524) and readon  (316 519 521 524) and ("Ma")  (410 and same (quas or inquas) same 'Al' same tunnel)  (40 (410 and same (quas or inquas) same 'Al' same tunnel)  (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same (quas or inquas) same 'Al' same tunnel) and (coherence ad) length)  (410 (410 and same quas same (and (410 and ( | ^~      | 316 919 921 924  | US-PGPUB; USBAT;                                   | 2005/05/27                          |
| (316 319 321 321) and [magnetic with impurity]  (316 319 321 321) and impurity impur |         |  | Ĥ  | 16:07                               |
| (116 519 511 324) and rendom  (116 519 51 321 324) and rendom  (116 519 51 324) and rendom  (117 519 51 325 and 51) and rendom  (117 519 51 519 519 519 519 519 519 519 519  |         | (916 919 921 924) and (magnetic with impurity)   | USPAT;<br>DERMENT;                                 | 2005/05/27<br>16:07                 |
| (116 519 521 524) and frankon  (116 519 521 518 518 518 518 518 518 518 518 518 51  | 4       | 319 521  | USPAT;<br>DERWENT;                                 | 2005/05/27                          |
| (1016 819 821 924) and ("Pur")  (1016ass same (quas or inquas) same "Al" same tunnel) and (chectric ad) field)  (1016ass same (quas or inquas) same "Al" same tunnel) and mm  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length)  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length)  (1016ass same (quas or inquas) same "Al" same tunnel) and (bp0"2001207"  (1016ass same (quas or inquas) same "Al" same tunnel) and (bp0"2001207"  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length)  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length) and (pt0"2001207"  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length) and (pt0"2001207"  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length) and (pt0"2001207"  (1016ass same (quas or inquas) same "Al" same tunnel) and (coherence ad) length) and (pt0"2001207"  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)  (1016ass same quas same insulator same undoped) and (electric ad) field)   | 1       |  | US-PGPUB; USPAT; 2005/<br>EPO; JPO; DERMENT; 16:07 | 2005/05/27<br>16:07                 |
| (algaes same (quas or inquas) same 'Al' same tunnel) and (electric add field)  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length)  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length)  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length)  (algaes same (quas or inquas) same 'Al' same tunnel) and (pbb'20041207*  (algaes same (quas or inquas) same 'Al' same tunnel) and (bbb'20041207*  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length) and dpd'20041207*  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length) and dpd'20041207*  (algaes same (quas or inquas) same 'Al' same tunnel) and (coherence add length) and dpd'20041207*  (algaes same quas same insulator same undoped and (electric add field)  (algaes same quas same insulator same undoped and (electric add field)  (algaes same quas same insulator same undoped and (electric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped and (alectric add field) and dpd'70041207*  (algaes same quas same insulator same undoped) and (alectric add field) and dpd'70041207*   | _ ي     |  | US-PGFUB; USPAT;<br>EPO; JPO; DERNENT;             | 2005/05/27<br>16:06                 |
| (algaes same (qaes or inqaes) same "Al" same tunnel) and mn  ((algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) length)  ((algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) length)  ((algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) fleid) and @pd>*20041207*  ((algaes same (qaes or inqaes) same "Al" same tunnel) and mand @pd>*20041207*  ((algaes same (qaes or inqaes) same "Al" same tunnel) and mand @pd>*20041207*  ((algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) length) and @pd>*20041207*  ((algaes same (qaes same insulator same undoped and (coherence ad) length) and @pd>*20041207*  ((algaes same qaes same insulator same undoped and (clectic ad) fleid)  ((algaes same qaes same insulator same undoped and (clectic ad) fleid)  ((algaes same qaes same insulator same undoped and (clectic ad) fleid)  ((algaes same qaes same insulator same undoped and (clectic ad) fleid)  ((algaes same qaes same insulator same undoped and (clectic ad) fleid)  ((algaes same qaes same insulator same undoped and (clectic ad) fleid) and @pd>*20041207*  ((algaes same qaes same insulator same undoped and (clectic ad) fleid) and @pd>*20041207*  ((algaes same qaes same insulator same undoped and (clectic ad) fleid) and @pd>*20041207*  ((algaes same qaes same insulator same undoped and (clectic ad) fleid) and @pd>*20041207*  ((algaes same qaes same insulator same undoped) and (clectic ad) fleid) and @pd>*20041207*  | <u></u> | (qaas or inqaas) same insulator same undoped) and (ele-  | US-FGPUB; USPAT;<br>EPO; JPO; DERWENT;             | 2005/05/27                          |
| (algaes same (gaes or ingaes) same "Al" same tunnel) and (coherence ad) length)  (algaes same (gaes or ingaes) same "Al" same tunnel) and (coherence ad) length)  (algaes same (gaes or ingaes) same insulator same undoped) and (electric ad) itald) and @pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and @pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and and @pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and (algaes same (gaes or ingaes) same "Al" same tunnel) and (coherence ad) length) and @pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and (coherence ad) length) and @pd>"20041207"  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)  (algaes same gaes same insulator same undoped) and (electric ad) itald)   | ω       | (algaas same (gaas or ingaas) same   | US-PGPUB; USPAT;<br>EPO; JPO; DERWENT;             | 2005/05/27                          |
| (algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) length)  (algaes same (qaes or inqaes) same al) and (coherence ad) length)  (algaes same (qaes or inqaes) same insulator same undoped) and (electric ad) fisid) and @pd>"20041207"  (algaes same (qaes or inqaes) same "Al" same tunnel) and @pd>"20041207"  (algaes same (qaes or inqaes) same "Al" same tunnel) and @pd>"20041207"  (algaes same (qaes or inqaes) same "Al" same tunnel) and (coherence ad) length) and @pd>"20041207"  (algaes same qaes same insulator same undoped) and (coherence ad) lingth) and @pd>"20041207"  (algaes same qaes same insulator same undoped) and (electric ad) field)  (algaes same qaes same insulator same undoped) and (electric ad) field)  (algaes same qaes same insulator same undoped) and (electric ad) field) and @pd>"20041207"  (algaes same qaes same insulator same undoped) and (electric ad) field) and @pd>"20041207"  (algaes same qaes same insulator same undoped) and (electric ad) field) and @pd>"20041207"   |         | Same   | US-PGFUB; USPAT; 2005/<br>EPO; JPO; DERWENT; 16:04 | 2005/05/27<br>16:04                 |
| 18 (algeas same (gaas or ingaas) same all and (coherence ad) length)  (algeas same (gaas or ingaas) same inaulator same undoped) and (alectric ad) field) and @pdo*20041207*  (algeas same (gaas or ingaas) same "Al" same tunnel) and @pdo*20041207*  (algeas same (gaas or ingaas) same "Al" same tunnel) and @pdo*20041207*  (algeas same (gaas or ingaas) same "Al" same tunnel) and (coherence ad) length) and @pdo*20041207*  (algeas same (gaas or ingaas) same "Al" same tunnel) and (coherence ad) length) and @pdo*20041207*  (algeas same gaas same insulator same undoped) and (electric ad) field)  (algeas same qaas same insulator same undoped and @pdo*20041207*  (algeas same qaas same insulator same undoped and (electric ad) field)  (algeas same qaas same insulator same undoped and (electric ad) field)  (algeas same qaas same insulator same undoped and (electric ad) field) and @pdo*20041207*  (algeas same qaas same insulator same undoped and (electric ad) field) and @pdo*20041207*  (algeas same qaas same insulator same undoped) and (electric ad) field) and @pdo*20041207*  | ឧ       | same "Al" same tunnel) and (coherence  | US-PGFUB; USPAT;<br>EPO; JPO; DERNENT;             | 2005/05/27                          |
| (elgees same (gaes or ingaes) same insulator same undoped) and (electric adj field) and 6pd>70061207"  (elgees same (gaes or ingaes) same "Al" same tunnel) and 6pd>70041207"  (elgees same (gaes or ingaes) same "Al" same tunnel) and mand 6pd>70041207"  (elgees same (gaes or ingaes) same "Al" same tunnel) and (coherence adj length) and 6pd>70041207"  2353 (2002000000000000000000000000000000000   |         |  | i  | USPAT; 2005/05/27<br>DERNENT; 16:04 |
| (algaes same (gaes or ingaes) same insulator same undoped) and (electric adj field) and 6pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and dpd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and mad 6pd>"20041207"  (algaes same (gaes or ingaes) same "Al" same tunnel) and (coherence adj length) and 6pd>"20041207"  (algaes same qaes same insulator same undoped and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field) and 6pd>"20041207"  (algaes same qaes same insulator same undoped and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field) and 6pd>"20041207"  (algaes same qaes same insulator same undoped) and (electric adj field) and 6pd>"20041207"   |         | S13 and  | US-PGPUB; USPAT; 2005/<br>EPO; JPO; DERMENT; 16:04 | 2005/05/27                          |
| (algaes same (gaes or ingaes) same "il" same tunnel) and dpd>"20041207"  (algaes same (gaes or ingaes) same "il" same tunnel) and mand dpd>"20041207"  (algaes same (gaes or ingaes) same "il" same tunnel) and (coherence adj length) and dpd>"20041207"  242  242  243  252 and 523 and 6pd>"20041207"  (algaes same qaes same insulator same undoped) and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field) and dpd>"20041207"  258  269  (algaes same qaes same insulator same undoped and (electric adj field)  (algaes same qaes same insulator same undoped and (electric adj field) and dpd>"20041207"  258  258  258  258  258  269  260  278  288  288  288  288  288  288  28  |         |  | US-PGPUB: USPAT; 2005/<br>EPO; JPO; DERWENT; 16:04 | 2005/05/27<br>16:04                 |
| (algaes same (gaas or ingaas) same "Al" same tunnel) and mand @pd>"20041207"  [1 (algaes same (gaas or ingaas) same al) and (coherence ad) length) and @pd>"20041207"  [242] algaes same (gaas same insulator  [25] same same (gaas or ingaas) same "Al" same tunnel) and (coherence ad) length) and @pd>"20041207"  [26] algaes same (gaas same insulator same undoped) and (electric ad) field)  [27] (algaes same qaas same insulator same undoped and @pd>"20041207"  [28] algaes same qaas same insulator same undoped and (electric ad) field) and @pd>"20041207"  [29] (algaes same qaas same insulator same undoped and (electric ad) field) and @pd>"20041207"  [20] (algaes same qaas same insulator same undoped and (electric ad) field) and @pd>"20041207"  | 6       | same (qaas ox ingaas) same "il" same tunnel)   | US-PGPUB; USPAI;<br>EPO; JPO; DERMENT;             | 2005/05/27<br>16:04                 |
| 1 (algaes same (gaes or ingaes) same al) and (coherence ad) length) and 53550 (2010 100 100 100 100 100 100 100 100 100  | 15      | (algaes same (gaas or ingaas) same "Al" same tunnel) and mn and @pd>"20041207"   | US-PGPUB; USPAT; 2005/<br>EPO; JPO; DERNENT; 16:09 | 2005/05/27<br>16:09                 |
| 142 algaes same gaes same insulator  9 \$22 and \$23 and @pd>"20041207"  9 \$22 and \$23 and @pd>"20041207"  1 algaes same gaes same insulator same undoped and (electric ad) fle  1 algaes same gaes same insulator same undoped and (electric ad) fle  1 algaes same gaes same insulator same undoped and @pd>"20041207"  1 algaes same gaes same insulator same undoped and @pd>"20041207"  1 algaes same gaes same insulator same undoped and @pd>"20041207"  228 algaes same gaes same insulator  |         | and (coherence adj length)   | US-PGPUB; USPAT;<br>EPO; JPO; DERWENT;             | 2005/05/27<br>16:04                 |
| algaas same gaas same insulator  \$ 322 and \$23 and @pd>"20041207"  (algaas same gaas same insulator same undoped  (algaas same gaas same insulator same undoped and (electric ad) fie  algaas same gaas same insulator same undoped and @pd>"20041207"  (algaas same gaas same insulator same undoped and @pd>"20041207"  (algaas same gaas same insulator same undoped and @pd>"20041207"  (algaas same gaas same insulator same undoped) and (electric ad) fise  228 algaas same gaas same insulator   |         | 3554 8597/0500 201/0514 195/0500 105 105 105 105 105 105 105 105 105   | US-PGFUB: USPAT; 2005/<br>EPO; JPO; DERMENT; 16:09 | 2005/05/27<br>16:04                 |
| \$ \$22 and \$23 and @pdo="20041207"  (algaas same (gaas or ingeas) same "Al" same tunnel) and (coherence in algaas same gaas same insulator same undoped and (electric adj fie algaas same gaas same insulator same undoped and @pdo="20041207"  (algaas same gaas same insulator same undoped and @pdo="20041207"  (algaas same gaas same insulator same undoped and (electric adj fie algaas same gaas same insulator   |         |  | US-PGPUB; USPAT;<br>EPO; JPO; DERWENT;             | 2005/05/27                          |
| (algass same (gass or ingeas) same "Al" same tunnel) and (coherence all algass same gass same insulator same undoped and (electric ad) fit algass same gass same insulator same undoped and (electric ad) fit algass same gass same insulator same undoped and (gads 20041207")  (algass same gass same insulator same undoped and (electric ad) fit algass same gass same insulator same undoped) and (electric ad) fits algass same gass same insulator  |         | PACALANT PARAMETER PROPERTY OF THE PARAMETER PROPERTY OF THE PACALANT PARAMETER PARAMETER PACALANT PACALANT PA   | US-FGFUB; USPAT; 2005/<br>EPO; JFO; DERWENT; 16:04 | 2005/05/27                          |
| 41 algaes same gaes same insulator same undoped  7 (algaes same gaes same insulator same undoped) and (electric adj fil  1 algaes same gaes same insulator same undoped and @pd>~20041207"  9 (algaes same gaes same insulator same undoped) and (electric adj fil  228 algaes same gaes same insulator  | _       |  | US-PGPUB; USPAT;<br>EPO, JPO; DERWENT;             | 2005/05/27                          |
| (algaas same gaas same insulator same undoped) and (electric adj fil algaas same gaas same insulator same undoped and (pds~20041207"  (algaas same gaas same insulator same undoped) and (electric adj fil algaas same gaas same insulator   | _       | algads same  | US-PGPUB; USPAI;<br>EPO; JPO; DERMENI;             | 2005/05/27                          |
| 1 algaas same gaas same insulator same undoped and (pds/20041207" 0 (algaas same gaas same insulator same undoped) and (electric adj fil   | 22      | same gass same insulator same undoped) and (electric ad) fil   | US-PGPUB; USPAI;<br>EPO; JPO; DERWENI;             | 2005/05/27                          |
| (algada same gada same insulator same undoped) and (electric adj fil algada same gada same insulator   | 23      |  | US-PGPUB; USPAT;<br>EPO; JPO; DERMENT;             | 2005/05/27                          |
|  |         | qaas same insulator same undoped) and (electric adj fi   | US-PGFUB: USPAT: 2005/<br>EPO: JFO: DERWENT: 16:03 | 2005/05/27                          |
|  | 25      | 28 algaas same gaas same the gaas same the gaas same the gaas same | US-PGPUB; USPAT;                                   | 2004/12/08                          |

whated EAST 5/27/05